

ABSTRACT

Regarding the method of analyzing and measuring a sample and a sample holder in a fluorescence measuring apparatus or phosphorescence measuring apparatus, the present invention is intended to eliminate or reduce the possibility of fluorescence and phosphorescence derived from the sample holder, and uses a holder material with little or no luminescence, fluorescence or phosphorescence for this object. The surface tension of sample liquid is effectively utilized to design the shape of the holder and to manufacture the holder.

A sample is placed on a sample holder when a sample is analyzed and measured in a fluorescence measuring apparatus or phosphorescence measuring apparatus. In this case, measurement is made independently of fluorescence or phosphorescence coming from other than said sample, without any object other than a sample placed in the path of excited light or light to be measured. The sample is held in said sample holder by surface tension. When a sample is measured in a fluorescence measuring apparatus or phosphorescence measuring apparatus, a carbon material, glassic carbon, tungsten carbon or pyro-coated carbon is processed and used to produce said sample holder.

An inverted conical, triangular conical, cylindrical or prismatic hole is provided on the carbon material or material with the minimum fluorescence or phosphorescence caused by excited light, and a hole of a very small diameter is opened on the bottom. Said sample is held in the plate hole by surface tension without leakage of sample despite the presence of a hole on the bottom.